Title of Instructional Materials: Houghton Mifflin Harcourt

Grade Level: Grade 5

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Summary of Houghton Mifflin Harcourt

Overall Rating:	⊠ Weak (1-2) □ Moderate (2-3) □ Strong (3-4)	Important Mathematical Ideas:	⊠ Weak (1-2) □ Moderate (2-3) □ Strong (3-4)
Summary / Justification / E Lack of depth and rigor. Cond standard areas not addressed	epts not well developed. Some	Summary / Justification / Evid	ence:
Skills and Procedures:	☐ Weak (1-2) ☑ Moderate (2-3) ☐ Strong (3-4)	Mathematical Relationships:	✓ Weak (1-2)✓ Moderate (2-3)✓ Strong (3-4)
Summary / Justification / E	vidence:	Summary / Justification / Evid	ence:



Title of Instructional Materials: Houghton Ma FFI of Harcourch

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS-FRACTIONS - 5.NF

Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.					
5.NF.1 Add and subtract fractions with unlike denominators (including mixed	Important Mathematical Ideas	 	<u> </u>		+	
numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)	(NO COM)	1	2	3	4	
a/b + c/u = (au + bc//bu.)	Skills and Procedures	1	2	3	4	
	Mathematical Relationships	← 1	2	3		
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E • Spackets work @ BACS S EQUIVALENT PRACTIONS A REAL WORLD PROBLEM • Spackets Nutt was @ R	440 A00 0 5.	i Sudrikir,	MONEY NEW	(E)	
	Portions of the domain, clu developed in the instruction	ıster, and st	andard that are			
	Overall Rating	+	2	1 >	/ → 4	



Title of Instructional Materials: Houghton Maffin Haccourt

Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation of how the domain, cluster, and standard armet. Cite examples from the materials.					
5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use	Important Mathematical Ideas 1 2 3 4					
benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.	Skills and Procedures 1 2 3 4					
	Mathematical Relationships 1 2 3 4					
Indicate the chapter(s), section(s), and/or page(s) reviewed. pp. 186, 188, 191, 193, 195-197, 208-212, 225-226	Summary / Justification / Evidence / Students solve mai would problems involving +/- of fructions (like and unlike) - Shudening assimate sums and differences of fractions					
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Students do not use benchmark frontions, only Contact descriptions					
	Overall Rating 1 2 3 4					

Reviewed	By:
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Title of Instructional Materials: Houghton Milfin Haccourt

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and docum etation of how the domain, cluster, and standard are m etCite exam plesiom the materials.					
5.NF.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading	Important Mathematical Ideas	1	2	3		
to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	Skills and Procedures	1	2	3	4	
Indicate the chapter(s), section(s), and/or pag (s) reviewed.	Mathematical Relationships	- 	- X - 2	3		
	Sum many / Justification / E - Students are asked to by a larger whole (s - kind world problems a	o divide a such as 4)	smaller who	le (such as t	Av.	
	Potti ons of the domain, cludev eloped in the instruction The book yeven as poor vice vices.	nal materi als	s (if any):		t well	
	Overall Rating	 	2	3	4	

Title of Instructional Materials: Houghton Mifflin Harcourt

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS - FRACTIONS - 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation of how the domain, cluster, and standard armet. Cite examples from the materials.					
5.NF.4a4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	Important Mathematical Ideas	1	2	3	}} 4	
a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)	Skills and Procedures	1	2	3		
	Mathematical Relationships	1	2	3	->	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E · Students multiply unit for · "Of" and it are required to the	vidence Factions and Judi Se di	1 por un to Fr	actions by		
	Portions of the domain, clu developed in the instruction			missing or n	ot well	
	Overall Rating			<u> </u>	×+	
		1	2	3	4	



Title of Instructional Materials: Houghton Mifflin Harcourt

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.					
5.NF.4b4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	Important Mathematical Ideas	Y 1	2	3	→ → 4	
b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	Skills and Procedures		 2	3		
	Mathematical Relationships		2	3	4	
	Summary / Justification / E	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
OUTSIDE SCOPE OF THIS BOX	Portions of the domain, clu developed in the instruction			missing or no	x well	
	Overall Rating	1	1 2	3	→ 4	



Title of Instructional Materials: Hounton Matthe Harcourt

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS - FRACTIONS - 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.					
 5.NF.5a 5. Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. 	Important Mathematical Ideas	← 1	2	3	 → 4	
	Skills and Procedures	1	2	3	4	
Indicate the chapter(s), section(s), and/or page(s) reviewed. ભુર. ૩૧૦, ૩૧૬, ૩૧૧	Mathematical Relationships	1	2	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4	
	Summary / Justification / Ex The book provides real-to- the geomograph phemselv	vidence Le problems es. Groblems	that help are valid	students docum	:/	
	Portions of the domain, cludeveloped in the instruction	nal materials ಕಸ್ತರ್ಧಗಳ	i (if any):	n inference	:	
	Overall Rating	1	2	1 3	4	

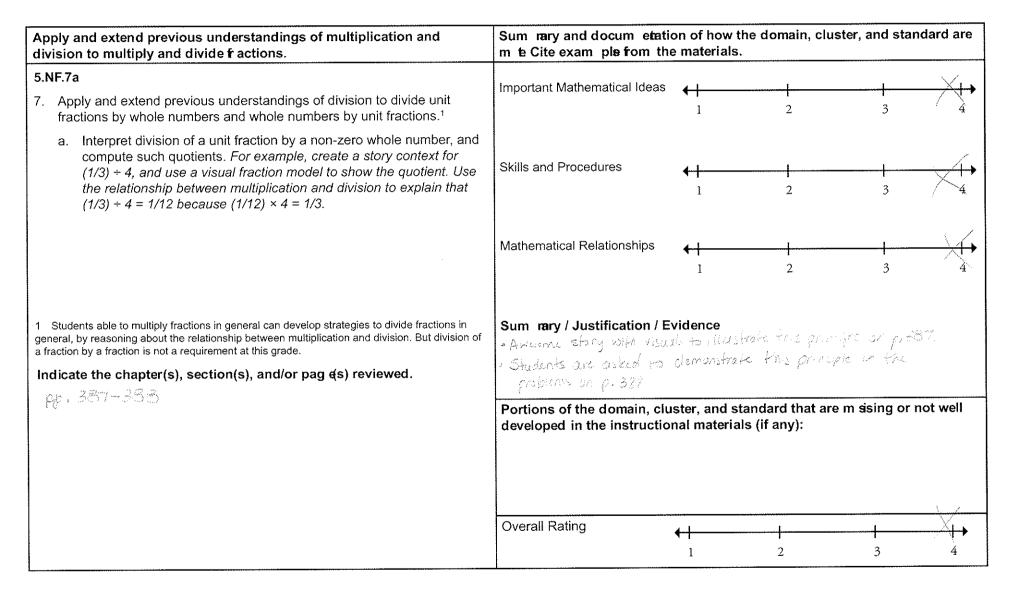
Title of Instructional Materials: Houghton M. Fflin Harcourt

Apply and extend previous understandings of multiplication and division to multiply and divide f actions.	Summary and docum etation of how the domain, cluster, and standard are m te Cite exam ple from the materials.					
5.NF.5b5. Interpret multiplication as scaling (resizing), by:	Important Mathematical Ideas	 	2	3 4		
b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b = (n × a)/(n × b) to the effect of multiplying a/b by 1.	Skills and Procedures	1	2	3 4		
	Mathematical Relationships	1	2	3 4		
Indicate the chapter(s), section(s), and/or pag (s) reviewed.	Sum mary/Justification/En On pp. 385-400. Station multiplied by a whole a whole number shi is Naviables and number	os are assect Aurigor or Lypedro- un as asc elle	(1975) 4 27.			
Pg. 381-382, 397-400	Portions of the domain, clu developed in the instruction			m sising or not well		
	·Again any depart a indicate that this the time	o inflicit Is a princi	conclusion ple that u	nor do tray peka all		
	Overall Rating	1	2	3 4		

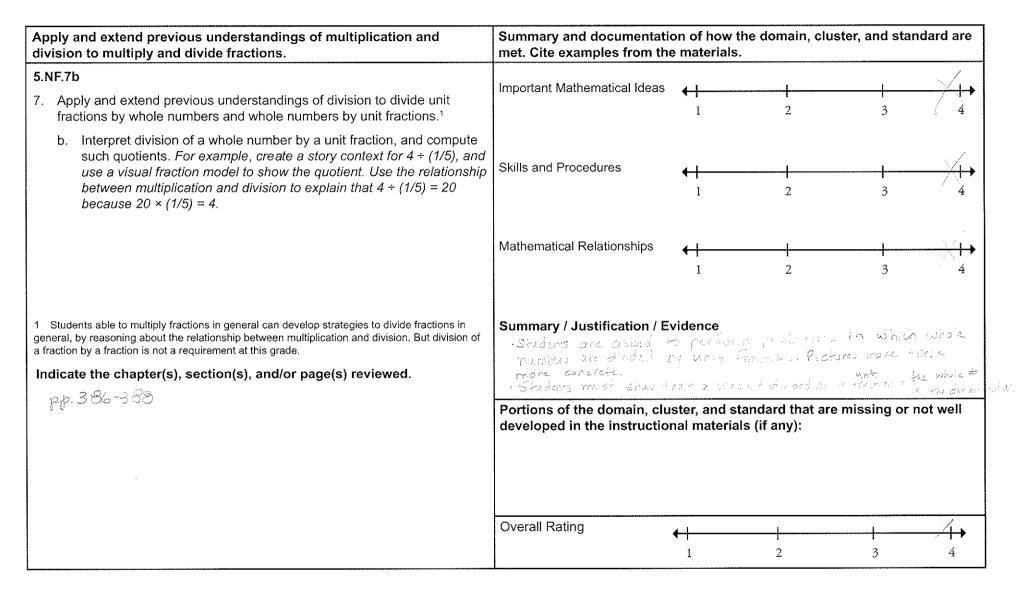
Title of Instructional Materials: Houghton Mifflin Harcourt

Apply and extend previous understandings of multiplication and division to multiply and divide f actions.	Sum mary and docum etation of how the domain, cluster, and standar m the Cite exam play from the materials.				
5.NF.6 Solve real world problems involving multiplication of fractions and mixed	Important Mathematical Ideas			-	///
numbers, e.g., by using visual fraction models or equations to represent the problem.		1	2	3	4
	Skills and Procedures	1	2		→
		*		~	· · · · · · · · · · · · · · · · · · ·
	Mathematical Relationships	1	2	3	4
	Sum mary / Justification / E Jaried word problems mixed markers.	vidence are gren	the hold	e kao 8020	s del
Indicate the chapter(s), section(s), and/or pag (s) reviewed.	· Service are and o	,	<u> </u>		
! ¥	Portions of the domain, clu developed in the instructio			m asing or	not well
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Title of Instructional Materials: Houghton M. 44 (in Haccourt





Title of Instructional Materials: Houghton Mitten Harcourt

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS - FRACTIONS - 5.NF

Apply and extend previous understandings of multiplication and Sum pary and docum etation of how the domain, cluster, and standard are division to multiply and divide f actions. m the Cite exam ple from the materials. 5.NF.7c Important Mathematical Ideas 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.1 c. Solve real world problems involving division of unit fractions by nonzero whole numbers and division of whole numbers by unit fractions. Skills and Procedures e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins? Mathematical Relationships 1 Students able to multiply fractions in general can develop strategies to divide fractions in Sum rary / Justification / Evidence general, by reasoning about the relationship between multiplication and division. But division of - Students folks rear work problems in other July on the a fraction by a fraction is not a requirement at this grade. THE RESERVED THE METER PROGRAMS SAID WITH MITTER. Indicate the chapter(s), section(s), and/or pag (s) reviewed. pp. 386-388 Portions of the domain, cluster, and standard that are m sising or not well developed in the instructional materials (if any): Overall Rating

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- y'class activities"

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.0A

Summary and documentation of how the domain, cluster, and standard are Write and interpret numerical expressions. met. Cite examples from the materials. 5.OA.1 Important Mathematical Ideas Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Page 39- Use & paventhuses Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating 1 2



Title of Instructional Materials: _

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MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.0A

Write and interpret numerical expressions.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.				
5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.	Important Mathematical Ideas	1	2	1	4
calculate the indicated sum or product.	Skills and Procedures	1	2		4
	Mathematical Relationships	1	2	1 /3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ev	vidence			
Unit 1 lessons Uses expession But requirementation	Portions of the domain, cluded developed in the instruction			re missing or no	ot well
	Overall Rating	1	2	3	

Reviewed By:

Title of Instructional Materials: Noth Typession

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.0A

Analyze patterns and relationships.	Summary and documentati met. Cite examples from the		e domain, clu	ster, and stan	dard are
5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting	Important Mathematical Ideas	1	2	3	4
of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	/3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Unit 1 - Lesson 4 - pg.37	Portions of the domain, clu developed in the instruction			e missing or n	ot well
	Overall Rating	1	2	/3	4

Reviewed By:			
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Title of Instructional Materials:	N\(\(\frac{1}{2}\)\\		

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Understand the place value system.	Summary and documentation met. Cite examples from the			ster, and sta	ındard are
5.NBT.1	I			_	
Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	4			
		1	2	3	Å
	Mathematical Relationships	4-1			
		1	2	3	X
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
pack of a smortation	Portions of the domain, cluded developed in the instruction			missing or	not well
	Overall Rating	(<u>l</u> 2	3	-\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

Nath Exercision

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use	Important Mathematical Ideas 1 2 3 4
whole-number exponents to denote powers of 10.	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
Pg. 87- "The Place value Value Parade"	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
<u> </u>	
	Overall Rating 1 2 /3 4

Reviewed By:	
Title of Instructional Materials:	

Understand the place value system.	Summary and documentation met. Cite examples from the	on of how the domain, cluster, and standard are e materials.
5.NBT.3a3. Read, write, and compare decimals to thousandths.	Important Mathematical Ideas	1 2 3 4
a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.	Skills and Procedures	1 2 3 4
doesn't show expanded for my decinal	Mathematical Relationships	1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence
Dag. 97- Expanded Form not as above	Portions of the domain, clu developed in the instruction	ster, and standard that are missing or not well nal materials (if any):
	Overall Rating	1 2 3 4

Title of Instructional Materials: Math Papers 1860

Understand the place value system.	Summary and documentation met. Cite examples from the			ster, and sta	ndard are
5.NBT.3b					\/
3. Read, write, and compare decimals to thousandths.	Important Mathematical Ideas	($\rightarrow \rightarrow$
 b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results 		1	2	3	4 .
of comparisons.	Skills and Procedures	 			
Visual		1	2	3	4
Limbs	Mathematical Relationships	4		1	4
dines rennes Vo of rennies		1	2	3	1 4
V() *9 *	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Page 88 - Compare	Portions of the domain, clu developed in the instruction			missing or	not well
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	Overall Rating	 	1	2	\
		1	2	3	$-/^4$

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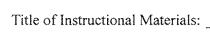
Title of Instructional Materials:

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.4	Important Mathematical Ideas
Use place value understanding to round decimals to any place.	1 2 3 4
Kont Know	Skills and Procedures 1 2 3 4
South know the factor of the state of the st	Mathematical Relationships 1 2 3 4
In the second	Summary / Justification / Evidence Nothing in S.E. demonstrates
Indicate the chapter(s), section(s), and/or page(s) reviewed.	+MPS
Page 121	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
"Classitetivity"	
	Overall Rating 1 2 3 4



Title of Instructional Materials:

Perform operations with multi-digit whole numbers and with decimals to hundredths.	Summary and documentati met. Cite examples from th		ne domain, cl	uster, and stand	lard are
5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	Important Mathematical Ideas	1	2		4
	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	1 2	18	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed. Dago 262 (Con fusing)	Portions of the domain, clu developed in the instructio			re missing or no	ot well
multplu milital	Overall Rating	1	2		4





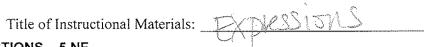
t Mathematical Ideas 1 2 3 4 I Procedures 1 2 3 4
1 2 3 4
itical Relationships
1 2 3 4
ry / Justification / Evidence
s of the domain, cluster, and standard that are missing or not well ed in the instructional materials (if any):
Rating
1 2 3 4
ed in

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Summary and documentation of how the domain, cluster, and standard are Perform operations with multi-digit whole numbers and with decimals to hundredths. met. Cite examples from the materials. 5.NBT.7 Important Mathematical Ideas Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Page: 85, 101-104 277-289 Concrete models? Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating



Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation met. Cite examples from the			ster, and stan	dard are
5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a	Important Mathematical Ideas	1	2	13	
way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)	Skills and Procedures	1	2		4
	Mathematical Relationships	1	2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cluded developed in the instruction	-		e missing or n	ot well
	Overall Rating	+ 1		3	 → 4

Reviewed By:	
Title of Instructional Materials:	- Faderior

Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation met. Cite examples from the			ster, and stand	ard are
5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using virtual fraction models or equations to represent the problem. Here	Important Mathematical Ideas	1	2	3	4
by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.	Skills and Procedures	1	 2	3,	
	Mathematical Relationships	1	2	18	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
700/0/186 188 191-197	Portions of the domain, clu developed in the instruction			e missing or no	t well
208-212					
	Overall Rating	1	2	3	
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Reviewed By:

Title of Instructional Materials:

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MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS-FRACTIONS - 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation of how the domain, cluster, and sta met. Cite examples from the materials.	ndard are
5.NF.3 Interpret a fraction as division of the numerator by the denominator $(a/b = a \div b)$. Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example,	Important Mathematical Ideas 1 2 3	4
interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	Skills and Procedures 1 2 3	4
	Mathematical Relationships 1 2 3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence	
Dago 312 385 381-358	Portions of the domain, cluster, and standard that are missing or developed in the instructional materials (if any):	not well
	Overall Rating 1 2 3	

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the		ne domain, clus	ter, and stan	dard are
5.NF.4a4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	Important Mathematical Ideas	1	2	3	4
 a. Interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a × q ÷ b. For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = ac/bd.) 	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	 2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Pages 371-372_	Portions of the domain, cluded developed in the instruction			missing or n	ot well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of multiplication and division to multiply and divide fractions. met. Cite examples from the materials. 5.NF.4b Important Mathematical Ideas 4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and Skills and Procedures show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well Could not-And developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentati met. Cite examples from th			ster, and stan	dard are
5.NF.5a5. Interpret multiplication as scaling (resizing), by:a. Comparing the size of a product to the size of one factor on the	Important Mathematical Ideas	1	2	3	4
basis of the size of the other factor, without performing the indicated multiplication.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, clu developed in the instruction			missing or n	ot well
	Overall Rating	{ 1	2	3	4

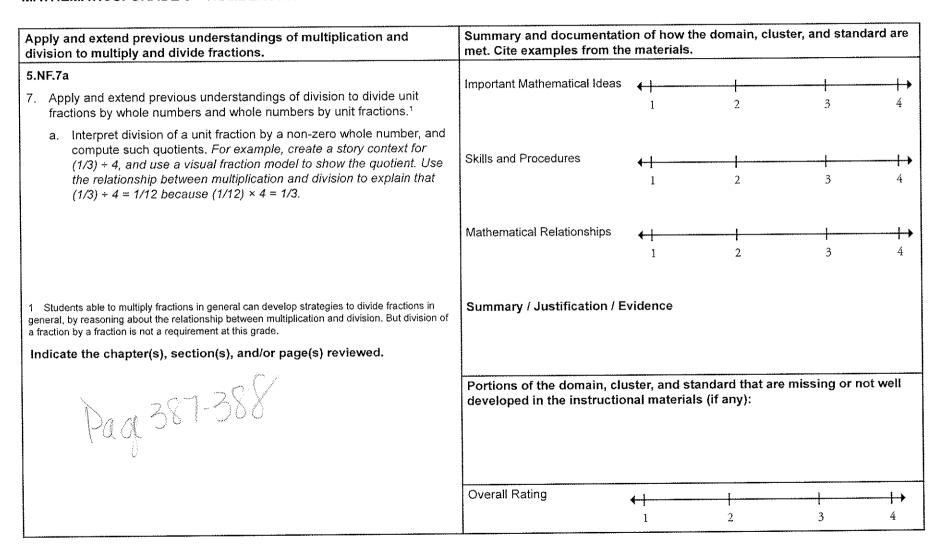
Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the			ter, and stand	dard are
5.NF.5b5. Interpret multiplication as scaling (resizing), by:	Important Mathematical Ideas	1	2	3	→ + 4
b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b = (n × a)/(n × b) to the effect of multiplying a/b by 1.	Skills and Procedures		2		——— 4
	Mathematical Relationships	1	2	3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			,
	Portions of the domain, clu developed in the instruction			missing or n	ot well
	Overall Rating	 	2	3	→ 4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the		ne domain, clus	ster, and stand	dard are
5.NF.6	Important Mathematical Ideas	4 1	1	1	
Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	Important Madio-Madour races	1	2 2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Page 315-317	Portions of the domain, clu developed in the instructio			missing or n	ot well
	Overall Rating	+	2	3	 →

Reviewed By:	
Title of Instructional Materials:	



Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
 5.NF.7b 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹ 	Important Mathematical Ideas	 	2	3		
b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.	Skills and Procedures	1	2	3	 →	
	Mathematical Relationships	1	2	3	4	
Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.	Summary / Justification / E	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
Pag 386-388	Portions of the domain, cluster, and standard that are missing developed in the instructional materials (if any):				or not well	
	Overall Rating	(1	2	3	<u></u>	

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.			
5.NF.7c 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹	Important Mathematical Ideas 1 2 3 4			
c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?	Skills and Procedures 1 2 3 4			
	Mathematical Relationships 1 2 3 4			
Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence			
Dago 386-35%	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):			
	Overall Rating			

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 5 - MEASUREMENT AND DATA - 5.MD

Convert like measurement units within a given measurement system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				dard are
5.MD.1	Important Mathematical Ideas	 			 }
Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.		1	2	3	4
	Skills and Procedures		2		 →
		i	2	5	'1
	Mathematical Relationships				 →
		I	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Dage 62 17-79	Portions of the domain, cluster, and standard that are mis developed in the instructional materials (if any):				ot well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Represent and interpret data.	Summary and documentati met. Cite examples from th			ster, and stan	dard are
5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems	Important Mathematical Ideas	1	2	3	4
involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	Skills and Procedures	1	2	3	
	Mathematical Relationships	(1	2	3	4
	Summary / Justification / E	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Pag 216	Portions of the domain, cludeveloped in the instruction			missing or n	ot well
	Overall Rating	1	2	3	→

37

INDIANA'S EDUCATION R O UNDTABLE

Houghton Mifflen Harcourt
Math Expressions
Overall - X2

Instructional Materials **Analysis and Selection**

Phase 3: Assessing Content Alignment to the Common Core State Standards for Mathematics

Grade 5

The Charles A. Dana Center at the University of Texas at Austin Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.OA

Write and interpret numerical expressions.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

5.OA.1

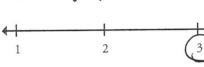
Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

Important Mathematical Ideas

Skills and Procedures

connected to algebra + order of operations

Mathematical Relationships



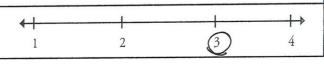
Indicate the chapter(s), section(s), and/or page(s) reviewed.

39 Using () in equations 40 - 52 - Properties of Multiplication 111-112-Properties 355-Parenthoss in expressions of algebra 349-Order of Operations

Summary / Justification / Evidence algebra included throughout the

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating



Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.OA

Write and interpret numerical expressions.	Summary and documentation of how the domain, cluster, and met. Cite examples from the materials.	standard are
5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to	Important Mathematical Ideas I 2 3) 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Skills and Procedures 1 2 3	
One spring in the state of the	Mathematical Relationships 1 2 3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.		
7,23/4 345-355 357	Portions of the domain, cluster, and standard that are missing developed in the instructional materials (if any):	g or not well
	Overall Rating I 2 3	→ 4

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.0A

Analyze patterns and relationships.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, clus	ter, and stand	ura a. c
5.OA.3	Important Mathematical Ideas	+	2	(3)	
Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	Skills and Procedures	1	2	3	
mionially may be a se	Mathematical Relationships	1	2	3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E Doesn't ask studen the relationship - I				
	Portions of the domain, cludeveloped in the instruction	uster, and s onal materia	tandard that are als (if any):	missing or n	ot well
	Overall Rating			1	د ا

The Charles A. Dana Center

Reviewed By:

Title of Instructional Materials:

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.1	Important Mathematical Ideas
Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	1 2 3
muet & Div by 10, 100	Skills and Procedures 1 2 3 4
	Mathematical Relationships 1 2 3 4
	Summary / Justification / Evidence No connections outside of mathematics
Indicate the chapter(s), section(s), and/or page(s) reviewed.	3
Indicate the chapter(s), section(s), and/or page(s) reviewed. 85 87 88 91-95-using hermals when using metric supplem	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
merin	Overall Rating 1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.2	Important Mathematical Ideas
Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	1 2 3 4
Wilder Hallow Days	Skills and Procedures
	1 2 3 4
. 20	Mathematical Relationships ← }
De Rags	1 2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Reviewed By:	

Title of Instructional Materials:

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.3a 3. Read, write, and compare decimals to thousandths.	Important Mathematical Ideas 1 2 3 4
 a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000). 	Skills and Procedures 1 2 3 4
models?	Mathematical Relationships 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence Expanded form is missing. No writing of decimals Compare
84 86A-86D 88	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
45	Overall Rating 1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.	re
 5.NBT.3b 3. Read, write, and compare decimals to thousandths. b. Compare two decimals to thousandths based on meanings of the 	Important Mathematical Ideas	 → 4
digits in each place, using >, =, and < symbols to record the results of comparisons.	Skills and Procedures 1 2 3	 → 4
	Mathematical Relationships 1 2 3	 → 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence Lacks real world examples V depth	
	Portions of the domain, cluster, and standard that are missing or not wel developed in the instructional materials (if any):	il.
	Overall Rating 1 2 3 4	

20

Reviewed By:	
Title of Instructional Materials:	

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.4 Use place value understanding to round decimals to any place.	Important Mathematical Ideas 1 2 3 4
No marber direct	Skills and Procedures 1 2 3 4
Vinus,	Mathematical Relationships 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed. 121 122	Summary / Justification / Evidence At broad Your Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
130	Overall Rating

Reviewed By:

Title of Instructional Materials:

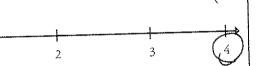
MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Perform operations with multi-digit whole numbers and with decimals to Summary and documentation of how the domain, cluster, and standard are hundredths.

5.NBT.5

Fluently multiply multi-digit whole numbers using the standard algorithm.

Skills and Procedures



Covered Craden Jahrines

Mathematical Relationships

Important Mathematical Ideas



Indicate the chapter(s), section(s), and/or page(s) reviewed.

262-mult w zero 268-275

Summary / Justification / Evidence

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Perform operations with multi-digit whole numbers and with decimals to Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. hundredths. 5.NBT.6 Important Mathematical Ideas Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular Skills and Procedures arrays, and/or area models. 3 Offer 100 in market Mathematical Relationships Summary / Justification / Evidence Stephed increasing? Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating 1

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Summary and documentation of how the domain, cluster, and standard are Perform operations with multi-digit whole numbers and with decimals to met. Cite examples from the materials. hundredths. 5.NBT.7 Important Mathematical Ideas Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. 85,101,103,104,277,278,279,280,281 283-288,293-295,301,302,315-318 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): 321, 322, 323, 324, 327, 328, 329 Overall Rating

Reviewed By:	

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS-FRACTIONS - 5.NF

Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation met. Cite examples from the	on of how the domain, cluster, and standard are e materials.
5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a	Important Mathematical Ideas	1 2 3 4
numbers) by replacing given fractions with equivalent sum or difference of fractions with like way as to produce an equivalent sum or difference of fractions with like denominators. For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)	Skills and Procedures	1 2 3 4
modela is	Mathematical Relationships	1 2 3 4
	Summary / Justification / E	Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.		
207, 208, 209, 211, 212	Portions of the domain, cludeveloped in the instruction	uster, and standard that are missing or not well onal materials (if any):
	Overall Rating	1 2 3 4

Reviewed By:

Title of Instructional Materials:

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS-FRACTIONS - 5.NF

Use equivalent fractions as a strategy to add and subtract fractions.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

5.NF.2

Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.

Important Mathematical Ideas



Skills and Procedures



Mathematical Relationships



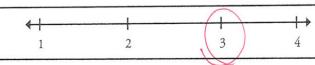
Summary / Justification / Evidence

Indicate the chapter(s), section(s), and/or page(s) reviewed.

186, 188, 191, 193, 195, 196, 197, 208-212 225-226

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating



Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the	on of how e materials	the domain, clus	ter, and stand	ard are
5.NF.3 Interpret a fraction as division of the numerator by the denominator $(a/b = a \div b)$. Solve word problems involving division of whole numbers leading	Important Mathematical Ideas	1	2	3	
to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	Skills and Procedures	1	2	3	
Between what two whole humbers does your answer he:	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
372,345,347,385	Portions of the domain, clu developed in the instructio	ster, and s nal materi	standard that are als (if any):	missing or no	ot well
	Overall Rating	1	2	3	- → 4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the	on of how e material	the domain, clus s.	ter, and Stand	aiu aic
5.NF.4a	Important Mathematical Ideas	4			
 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. 		1	2	3	4
a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)	Skills and Procedures	1	2	3	 → 4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
371,372, 374, 1374	Portions of the domain, cludeveloped in the instruction	uster, and onal mater	standard that are ials (if any):	missing or n	ot well
	Overall Rating	 		3	4

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of multiplication and met. Cite examples from the materials. division to multiply and divide fractions. 5.NF.4b Important Mathematical Ideas 4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and Skills and Procedures show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 371,872,374 developed in the instructional materials (if any): Overall Rating 4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the	on of how to materials	he domain, clus	ster, and stand	Jaiu aic
5.NF.5a	Important Mathematical Ideas	4			
5. Interpret multiplication as scaling (resizing), by:	Important Mathematics, 14045	1	2	3	4
Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated					
multiplication.	Skills and Procedures	 			
		1	2	3	4
	Mathematical Relationships	4.1	1		
	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
andicate the chapter(s), section(s), and or page(s), even and or page(s)	Portions of the domain, clu developed in the instructio	ster, and s	standard that are als (if any):	e missing or r	ot well
ω [*]	Overall Rating	4 		3	

The Charles A. Dana Center

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of multiplication and met. Cite examples from the materials. division to multiply and divide fractions. 5.NF.5b Important Mathematical Ideas 5 Interpret multiplication as scaling (resizing), by: b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); Skills and Procedures explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 361,352,397) 300 (200 uno developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.					dard are
5.NF.6	Important Mathematical Ideas	S 4			
Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	mportant masses	1	2	3	4
	Skills and Procedures	1	2	3	 } 4
	Mathematical Relationships	4-			+
		1	2	3	4
	Summary / Justification / I	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
375-377 - 30h	Portions of the domain, cl developed in the instruction	luster, and s onal materia	tandard that a ils (if any):	re missing or n	ot well
397 - propries					
405	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of multiplication and met. Cite examples from the materials. division to multiply and divide fractions. 5.NF.7a Important Mathematical Ideas 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.1 a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for Skills and Procedures (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$. Mathematical Relationships Summary / Justification / Evidence 1 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, clus	ter, and stand	lard are
 5.NF.7b Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹ 	Important Mathematical Ideas	1	2	3	
b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.	Skills and Procedures	1	2	3	 → 4
	Mathematical Relationships	1	2	3	4
1 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division a fraction by a fraction is not a requirement at this grade. Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
	Portions of the domain, clu developed in the instruction	ster, and st nal materia	andard that are Is (if any):	missing or n	ot well
\$ A					
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Summary and documentation met. Cite examples from the	on of how ti e materials.	ne domain, clu	ster, and stand	iard are
 5.NF.7c Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.¹ 	Important Mathematical Ideas	1	2	3	
c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?	Skills and Procedures	← 	2	3	4
	Mathematical Relationships	1	2	3	4
1 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	ividence			
	Portions of the domain, cludeveloped in the instruction	uster, and st onal materia	andard that are	e missing or n	ot well
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Convert like measurement units within a given measurement system.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, clus	ter, and stanc	lard are
5.MD.1	Important Mathematical Ideas	4			
Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.		1	2	3	4
	Skills and Procedures	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
62.73-79	Portions of the domain, cludeveloped in the instruction	uster, and st onal materia	andard that are ls (if any):	missing or n	ot well
2:39 - 244					
	Overall Rating		2	3	4

Reviewed By:	
Title of Instructional Materials:	

Represent and interpret data.	Summary and documentation met. Cite examples from the	on of how the materials.	he domain, clus	ster, and stand	lard are
5.MD.2	Important Mathematical Ideas	 			
Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed	Skills and Procedures	1	2	3	4
		1	2	3	4
equally.	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
2 1 is	Portions of the domain, clu developed in the instruction	ster, and st	andard that are Is (if any):	missing or n	ot well
	Overall Rating	<u>+</u>	2	3	 4

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Title of Instructional Materials:	

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation met. Cite examples from the	on of hove materia	w the domain, clus ls.	ter, and stand	dard are
5.MD.3a	Important Mathematical Ideas	4			
 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 	Important Matternation	1	2	3	4
 A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume. 	Skills and Procedures	4 			
		1	2	3	4
	Mathematical Relationships	1	2	3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
	Portions of the domain, clu developed in the instruction	ster, and nal mate	l standard that are rials (if any):	missing or n	ot well
Ž 🔗	Overall Rating	1	1 2	3	

Reviewed By:	
Title of Instructional Materials:	

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation of how the domain, cluster, and standard armet. Cite examples from the materials.					
5.MD.3b	Important Mathematical Ideas	4				
 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. 		1	2	3	4	
b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	Skills and Procedures	1	2	3	4	
	Mathematical Relationships	1	2	3		
	Summary / Justification / E	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
G A	Portions of the domain, clu developed in the instructio	ister, and st nal materia	andard that are	missing or n	ot well	
	Overall Rating	4 	2	3	— → 4	

Reviewed By:	
Title of Instructional Materials:	

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.						
5.MD.4	Important Mathematical Ideas 🔸	4					
Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.		1	2	3	4		
	Skills and Procedures	« 	2	3	 - >		
		1	L	J			
	Mathematical Relationships	1	2	3	4		
	Summary / Justification / E	vidence					
Indicate the chapter(s), section(s), and/or page(s) reviewed.							
	Portions of the domain, clu developed in the instructio	ister, and s nal materia	tandard that ard	e missing or n	ot well		
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Reviewed By:	
Title of Instructional Materials:	

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation met. Cite examples from the	on of hov materia	v the domain, clust ls.	ter, and stan	dard are
5.MD.5aRelate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	Important Mathematical Ideas	4 1	2	3	4
a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.	Skills and Procedures	↓	2	3	4
	Mathematical Relationships	1	2	3	
to the shorter(a) costion(s) and/or nage(s) reviewed	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, clu developed in the instruction	ster, and nal mate	standard that are rials (if any):	missing or n	ot well
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Title of Instructional Materials:	

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation met. Cite examples from the	on of how materials	the domain, clus	ter, and stan	dard are
5.MD.5b5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	Important Mathematical Ideas	4 	2	3	4
b. Apply the formulas $V = I \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	Skills and Procedures	1 	2	3	
	Mathematical Relationships	1	2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
	Portions of the domain, clu developed in the instruction	ster, and s nal materi	standard that are als (if any):	missing or n	ot well
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Reviewed By:	
Title of Instructional Materials:	

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation of how the domain, cluster, and stand met. Cite examples from the materials.					
5.MD.5c5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	Important Mathematical Ideas	1	2	3		
c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.	Skills and Procedures	1	2	3		
	Mathematical Relationships	4 1	2	3		
	Summary / Justification / E	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, clu developed in the instructio	ster, and nal mater	standard that are rials (if any):	míssing or n	ot well	
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Reviewed By:	
Title of Instructional Materials:	

Graph points on the coordinate plane to solve real-world and mathematical problems.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate	Important Mathematical Ideas	4	2	3		
system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Skills and Procedures	√ · · · · · · · · · · · · · · · · · ·	2	3	 ->	
	Mathematical Relationships	1	2	3		
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence				
36 1-362 365-367 365-367	Portions of the domain, clu developed in the instructio	ster, and s nal materia	tandard that are ils (if any):	míssing or n	ot well	
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Reviewed By:	
Title of Instructional Materials:	

Graph points on the coordinate plane to solve real-world and mathematical problems.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.						
5.G.2	Important Mathematical Ideas	<u> </u>					
Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.		1	2	3	4		
	Skills and Procedures	4					
		1	2	3	4		
	Mathematical Relationships	4-1					
		1	2	3	4		
	Summary / Justification / E	vidence					
Indicate the chapter(s), section(s), and/or page(s) reviewed.	One real world						
368 NE	Portions of the domain, clu developed in the instruction	ster, and st	andard that are is (if any):	e missing or n	ot well		
	Overall Rating	. 1	2	3			

Reviewed By:	
Title of Instructional Materials:	

Classify two-dimensional figures into categories based on their properties.	Summary and documentation of how the domain, cluster, and standard ar met. Cite examples from the materials.				ard are
5.G.3	Important Mathematical Ideas				
Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.		1	2	3	4
fight angles.	Skills and Procedures	1	2	3	4
facter dopment	Mathematical Relationships	← 1	1 2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
157-160	Portions of the domain, clu developed in the instructio	ster, and sta	indard that are s (if any):	missing or n	ot well
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Title of Instructional Materials:	

Classify two-dimensional figures into categories based on their properties.	ories based on their Summary and documentation of how the domain, cluster, and standard ar met. Cite examples from the materials.				
5.G.4	Important Mathematical Ideas	4			→
Classify two-dimensional figures in a hierarchy based on properties.		1	2	3	4
	Skills and Procedures	1	2	3	4
Lacks development	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.		141			
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):				ot well
	Overall Rating	1	1 2	3	

Title of Instructional Materials

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als:	Math	Ex.	problem.	-
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MATHEMATICS: GRADE 5 - GEOMETRY - 5.G

Graph points on the coordinate plane to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the		ne domain, clus	ter, and stand	dard are
5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate	Important Mathematical Ideas	+1	*************************************		
system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Skills and Procedures	1	2	3 ————————————————————————————————————	4 1 4
y-coordinate).	Mathematical Relationships	+			
		1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ex	vidence –	la Veing nultiple o	m rigo	
Hadra chapter, 12:351-370	Portions of the domain, cludeveloped in the instruction			nissing or no	ot well
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Title of Instructional Materials:	

Graph points on the coordinate plane to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the			ter, and stan	dard are
5.G.2	Important Mathematical Ideas	_			_
Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.		1 2		3	4
	Skills and Procedures	4-1			
	1	1 .	2	3	4
	Mathematical Relationships	4			
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	Summary / Justification / Ev	/idence		\$	
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Title of Instructional Materials:	

Classify two-dimensional figures into categories based on their properties.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four	Important Mathematical Ideas	1	2	3	4
right angles. Unit 4 Lines & Angles P. 151-178	Skills and Procedures		2	3	4
1 +163-164 Categories	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ev Life Carello Specifically 2-1	vidence Striffed Striffed	ta j Im Sa	+ not	
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	Overall Rating	1	2	3	

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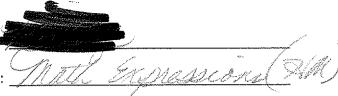
Title of Instructional Materials: _

Classify two-dimensional figures into categories based on their properties.	Summary and documentation met. Cite examples from the			ster, and stan	dard are
5.G.4	Important Mathematical Ideas		1		L×
Classify two-dimensional figures in a hierarchy based on properties.	important wathematical ideas	1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	
	Summary / Justification / E	vidence [·]			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
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	Overall Rating	\	2	3	 → 4

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Reviewed By:

Title of Instructional Materials:



Graph points on the coordinate plane to solve real-world and mathematical problems.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed. The full depth of 1980. The multiple approaches.	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Reviewed By:	
Title of Instructional Materials:	

Graph points on the coordinate plane to solve real-world and mathematical problems.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Important Mathematical Ideas 1 2 3 4
	Skills and Procedures 1 2 3 4
	Mathematical Relationships 2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cluster, and standard that are missing or not well
	developed in the instructional materials (if any):
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Title of Instructional Materials:	

Classify two-dimensional figures into categories based on their properties.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.G.3	Important Mathematical Ideas
Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four	Important Mathematical Ideas 1 2 3 4
right angles.	Skills and Procedures 2 3 4
	Mathematical Relationships
	2 3 4
	Summary / Justification / Evidence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	not their
Unit & Lenine 1	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
P151	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
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Title of Instructional Materials:		

Classify two-dimensional figures into categories based on their properties.	Summary and documentat met. Cite examples from the			ster, and stan	dard are
5.G.4 Classify two-dimensional figures in a hierarchy based on properties.	Important Mathematical Ideas	1	2	3	4
P/63+164 were limited of best	Skills and Procedures	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	3	
i	Mathematical Relationships	**************************************	2	3	4
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Indicate the chapter(s), section(s), and/or page(s) reviewed.					•
no connection	Portions of the domain, cl developed in the instruction			missing or n	ot well
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	Overall Rating	+1	2	3	—————————————————————————————————————
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Title of Instructional Materials:
TIONS - 5.NF

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MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS-FRACTIONS - 5.NF

Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.	are
5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like	Important Mathematical Ideas 1 75 2 3	4
denominators. For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)	Skills and Procedures 1 / 2 3	4
	Mathematical Relationships 1 / 2 3	- → 4
Indicate the chapter(s), section(s), and/or page(s) reviewed. 277-212 - fronthink 184-195 372-386,387388	Summary / Justification / Evidence Office of the set o	
	Portions of the domain, cluster, and standard that are missing or not we developed in the instructional materials (if any): S.NF.46 missing S.NF.566 hours, addressed - not well developed S.NF.766 and well developed	əll
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Title of Instructional Materials:

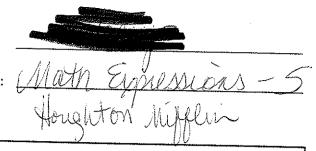
The Sequence of Materials:

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MATHEMATICS: GRADE 5 - MEASUREMENT AND DATA - 5.MD

Convert like measurement units within a given measurement system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these	Important Mathematical Ideas 1 2 3 4
conversions in solving multi-step, real world problems. Student had as activity books Jayout J SE has a disconnected furtile	Skills and Procedures 1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed. 22, 77-79; 239-244 convening news. 214 - Live plant 231-236 Volume	Mathematical Relationships 1 2 3 4
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	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): 5. mo. 1 well developed 5. mo. 2 the plat only of and and severlines front events in 5. mo. 3 the developed 5. mo. 36 the developed 5. mo. 56 the self developed the leading part soll 5. mo. 56 the presents of the self developed the leading part soll 5. mo. 50 the presents of the self developed the leading part soll 5. mo. 50 the presents of the self developed the leading part soll 5. mo. 50 the presents of the self developed the leading part soll 5. mo. 50 the presents of the self developed the leading part soll 5. mo. 50 the presents of the self developed the leading part of the self developed the leading part of the self developed th
	Overall Rating $\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Title of Instructional Materials:



Documenting Alignment to the Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Hard Cover & Consumable Activity Book version.

Many groblems offered, but the process is not well-modeled nor explained.

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Indicate the chapter(s), section(s), or page(s) reviewed.

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Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



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Title of Instructional Materials:	

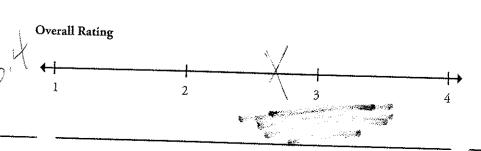
2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



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Title of Instructional Materials:	

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.



Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



Reviewed By:	
Title of Instructional Materials:	

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence





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Title of Instructional Materials:	

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



Acquimentine Alt	Title of Instructional Materials:
ocumenting Alignment to the tandards for Mathematical Practice	Traccitais.
6. Attend to precision.	
<u> </u>	Tacture
specifying units of measure, and labeling axes to clarify the express numerical answers with a degree of precision approximation.	isely to others. They try to use clear definitions in discussion with others and in their own se, including using the equal sign consistently and appropriately. They are careful about correspondence with quantities in a problem. They calculate accurately and efficiently, priate for the problem context. In the elementary grades, students give carefully formulated of they have learned to examine claims and make explicit use of definitions.
1.2	
2.4	
Indicate the chapter(s), section(s), or page(s) reviewed.	Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):
Summary/Justification/Evidence	Overall Rating
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Title of Instructional Materials:	

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

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Indicate the chapter(s), section(s), or page(s) reviewed.

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Overall Rating

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Title of Instructional Materials:	

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation (y-2)/(x-1) = 3. Noticing the regularity in the way terms cancel when expanding (x-1)(x+1), $(x-1)(x^2+x+1)$, and $(x-1)(x^3+x^2+x+1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate

The sum of a geometric series. As they work to solve a problem oversight of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the process, while attending to the details. They continually evaluate the reasonableness of the sum of a geometric series. As they work to solve a problem of the sum of a geometric series. As they work to solve a problem of the sum of a geometric series. As they work to solve a problem of a geometric series. As they work to solve a problem of a geometric series. As they work to solve a problem of a geometric series. As they work to solve a problem of a geometric series. As they work to solve a problem of a geometric series of a geometric ser

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



Title of Instructional Materials:

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.OA

Write and interpret numerical expressions. Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. 5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and Important Mathematical Ideas evaluate expressions with these symbols. 40 - Story problems
41 - proporties, no links to order
52 - Story problems Skills and Procedures Mathematical Relationships 111 - Regroupingy proper Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 5 - OPERATIONS AND ALGEBRAIC THINKING - 5.0A

Write and interpret numerical expressions.	Summary and documentation of how the domain, cluster, and standard are				
5.OA.2	met. Cite examples from the materials.				
Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.	Important Mathematical Ideas 1 2 3 4				
Sq-frea & perimeter - this is	Skills and Procedures 1 2 3 4				
pumple 1 236 gust pro	Mathematical Relationships + X + X + X + X				
ndicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence				
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):				
	Overall Rating				

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Analyze patterns and relationships.	Summary and documentation of met. Cite examples from the m	of how the	domain, clus	ter, and stand	lard ar
5.OA.3	met. Cite examples from the m	aterials.	,		
of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the puls "Add 2" and the content of the	Important Mathematical Ideas 🔸	1	2	3	
Add b" and the starting number A govern-	Skills and Procedures	 1	2	3	4
Supplied the second of the sec	Mathematical Relationships	1	2	3	
1. b the to the	Summary / Justification / Evidence				
ndicate the chapter(s), section(s), and/or page(s) reviewed.					
511 wal wal	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):				
Indicate the chapter(s), section(s), and/or page(s) reviewed.	No elegendation and	Parerials (II	any): · · d d d	**	

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Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 5 - NUMBER AND OPERATIONS IN BASE TEN - 5.NBT

Understand the place value system.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.					
5.NBT.1	mod one examples from the	e materials	i <u>.</u>			
Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Important Mathematical Ideas	4-1				
		1	2	3	4	
	Skills and Procedures	(1	
		1	2	3	4	
	Mathematical Relationships		- 			
		1	2	3	4	
	Summary / Justification / Ev	vidence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):					
	Overall Rating	1	2	3	++	

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